

oxes are among the most widely distributed animals on earth. Foxes are native to five of the seven continents and inhabit areas from the arctic tundra, arid deserts, grassland prairies, and steppes, to boreal and tropical forests; they can inhabit virtually any environment humans inhabit. There are over twenty-two species of foxes in the world, and Alabama is home to only two of them: the red fox (Vulpes vulpes) and the gray fox (Urocyon cinereoargenteus). The red and gray fox both members of the dog family (Canidae) – are secretive by nature and are seldom seen during the day. Sightings typically occur either early in the morning or late in the evening.

## Distribution

The red fox is the most widely distributed carnivore in the world. It occurs throughout Canada, Europe, Asia, the

former USSR, and the United States. Some speculate that the red fox might not have been native to the United States, but originated from the European fox that was introduced into the southeastern U.S.

The gray fox occurs in much of eastern North America and extends into Mexico, Central America, and Venezuela. The gray fox does not extend into the mountainous areas in the northwest United States and Canada, parts of the Great Plains, or eastern Central America.

## Description

The red fox is the larger of the two foxes found in Alabama. The most recognizable fox species, it is identified by its bright reddish coat with a white underbelly, chin, and throat. Its key characteristic is the white tip on the end of its bushy tail. The lower legs, feet, and back

of ears are usually black. In the northern parts of the United States and Canada, the red fox can be black, silver, or bluish gray in color.

The gray fox is slightly smaller than the red fox, and there is little color variation within this species. Gray foxes have a gray coat with buff underfur and rusty yellow sides, legs, feet, and backs of the ears. The bushy tail with black stripe and black tip is a key characteristic to identifying this species. Gray foxes can be mistaken for red foxes due to the reddish coloration on their sides. They can also be mistaken for coyotes with their gray coat and bushy tail, especially if seen from a distance.

## Biology & Life History

The red and gray fox form monogamous pair bonds during the breeding season, with both parents caring for the

(Continued on page 20)

# Foxes of Alabama (Continued from page 19)

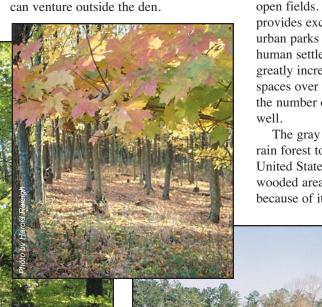


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young. Primary den sites for the red fox are usually underground, whereas the gray utilize above-ground sites such as brush piles, rock crevices, and thickets. Den sites are usually located within their territory for raising pups or kits when they are born. The male will defend its

territory and bring back food for the

female until the pups are old enough to be left alone; at this time both parents will hunt for food. After two to three months, the pups have been weaned and

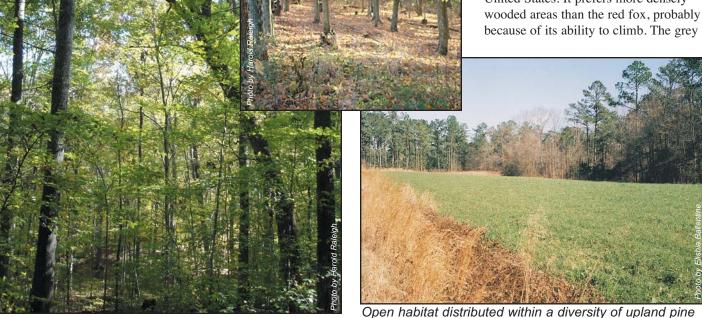


Both red and gray foxes are omnivorous, feeding on a variety of plant and animal material. They may prey on such items as rodents, rabbits, squirrels, birds, insects, or fruit. Their diet varies seasonally: fruits and insects may comprise the bulk of their diet during summer and fall, whereas small mammals and a host of other prey comprise the bulk of the diet in winter and spring. Foxes are opportunistic feeders that will feed on anything small or slow enough to catch.

#### Habitat

The red fox inhabits a wide range of environments. They are known to live in coniferous and deciduous forests, marshes, desert shrub lands, on prairies, and arctic tundra, not to mention their familiarity in suburban and urban environments. These animals are not common in extremely dense forests, rather preferring the boundary areas between woods and open fields. Farmland near wooded areas provides excellent fox habitat, as do urban parks and golf courses. Since human settlement in North America has greatly increased the amount of such spaces over the last two hundred years, the number of red foxes has increased as

The gray fox's habitat ranges from rain forest to the eastern forests of the United States. It prefers more densely



Mixed pine/hardwood environments are utilized by both red and gray foxes for their daily habitat requirements.

and mixed pine/hardwoods can provide both red and gray foxes with suitable reproductive and foraging environment.

fox population is now lower than before the first European settlers arrived, although it can still be seen through much of its original range.

## Management

Most landowners and land managers in Alabama do not directly manage their habitat for foxes, but foxes benefit indirectly through management of game species in Alabama. Management practices that promote deer, turkey, rabbit, and quail will also benefit that of both red and gray foxes. Establishing fallow fields provides an abundance of insects, cover, brood rearing, and nesting habitat to game species and at the same time provides the fox with an abundant supply of insects and small rodents. Managing for mixed-pine hardwoods by thinning and establishing a burn rotation will also improve habitat conditions for foxes, especially the gray fox since it has adapted to woodland habitats.

Foxes may be either beneficial or harmful, depending on your perspective.

While a poultry farmer would consider the fox a nuisance for preying on his chickens, a farmer planting agricultural crops might appreciate it for controlling mice, rats, and other agricultural pests. There is no question that foxes are efficient predators and will prey on domestic and game species, but the percentage taken by fox predation is small compared to the losses sustained due to loss of habitat. Research studies have suggested that red fox predation in the

prairie-pothole region of North America is an exception where it may be partly to blame for poor reproductive success in nesting waterfowl.

Landowners interested in managing for game species should hunt and trap foxes, in keeping with state regulations to hold them below habitat carrying capacity. Regardless of your opinion of foxes, they do play an important role in the environment, and there is still a lot to learn about the role they play in the ecology of our forests.

## Population Status

The future population of the red fox is uncertain. With the nationwide expansion Summer 2006



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of the coyote in the early 1970s, coyotes have also expanded throughout much of

Alabama. The red fox and coyote occupy similar habitat, and according to field

studies, red foxes avoid coyote ranges and coyotes exclude red foxes from the majority of their range. If these studies are correct, the population of red foxes in

> Alabama may slowly start to decline over the next several decades as coyotes occupy more available habitat. Areas of the state that have low density of coyotes should have stable populations of red foxes.

The status of the gray fox is characterized by widespread, healthy populations in most areas. Habitat availability may limit its distribution, but lack of habitat does not appear to pose an immediate threat.



	Red Fox	Gray Fox
Breeding Season:	Dec-Feb	Feb-March
Gestation:	51-54 days	51-63 days
Home Range:	500-2000 acres	640-1280 acres
Litter Size:	1-10(5)*	1-10(4)*
* Average Litter Size		

### References

Yarrow, G.K. and D.T. Yarrow. 1999. Managing Wildlife. Sweetwater Press. 11: 241-243. (http://www.outdooralabama.com/watchable-wildlife/what/Mammals/Carnivores/rf.cfm) (http://en.wikipedia.org/wiki/Red\_Fox)